

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Technical Conference on Modernizing	)	Docket No. AD21-10-000
Electricity Market Design: Resource	)	
Adequacy in the Evolving Electricity Sector	)	

**Statement of Elise Caplan, Independent Consultant  
on behalf of the Sustainable FERC Project**

This technical conference is an important first step in a long overdue initiative to reform and modernize the resource adequacy paradigm. While the difficulties caused by these constructs have worsened over the years, they are not new. Almost eight years ago, in September 2013, the Commission held a technical conference “to consider how the current centralized capacity market rules and structures in the regions served by ISO New England Inc. (ISO-NE), New York Independent System Operator, Inc. (NYISO), and PJM Interconnection, L.L.C. (PJM) are supporting the procurement and retention of resources necessary to meet future reliability and operational needs.”<sup>1</sup> Four years later, in May 2017, a two-day technical conference was held “to explore how the competitive wholesale markets can select resources of interest to state policy makers while preserving the benefits of regional markets and economic resource selection” and to consider the “long-term expectations regarding the relative roles of competitive wholesale markets and state policies in the Eastern RTOs/ISOs in shaping the quantity and composition of resources needed to cost-effectively meet future reliability and operational needs.”<sup>2</sup>

This ongoing effort demonstrates that these constructs are fundamentally unsustainable, especially with regard to their ongoing conflicts with critical state efforts to pursue environmental policy goals. States in the Eastern RTOs/ISOs (ISO-NE, NYISO and PJM), like many states across the nation, are increasing their efforts to accelerate the transition to a decarbonized fleet of resources. Rather than ensuring that the RTO/ISO markets can support these actions, a series of Commission-approved changes to the Minimum Offer Price Rule (MOPR) – justified by unsupported claims of “price suppression” – have only created greater barriers to implementation of these state policies.

In PJM, the focus of this technical conference, a quick overview of resource development over the past three years demonstrates the problematic outcomes of the Reliability Pricing Model (RPM) and the likely harm that will result from the new MOPR requirements. According to the most recent State of the Market Report for PJM, between June 2018 and 2020, capacity procured by PJM was at least 7 to 9 percentage points above the reserve margin, averaging about 11,000 megawatts (MW) of surplus capacity each year.<sup>3</sup> But this the surplus may be as high as 12 to 13

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<sup>1</sup> Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators, Supplemental Notice of Technical Conference, Docket No. AD13-7-000 (August 23, 2013).

<sup>2</sup> State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C., Supplemental Notice of Technical Conference, Docket No. Docket No. AD17-11-000 (April 13, 2017).

<sup>3</sup> 2020 State of the Market Report for PJM, Monitoring Analytics, March 2021, Table 5-7,

percentage points or about 18,000 MW for each of the 2019/20 and 2020/21 delivery years when errors in the peak load forecast are taken into account.<sup>4</sup>

At the same time, new resource development in PJM was dominated by the continued construction of new natural gas plants built on a merchant basis – meaning these developers are relying on capacity and energy market revenues for their earnings, rather than revenue from bilateral contracts or other resources.

Resource development in PJM in recent years has been skewed much more heavily towards natural gas than in the rest of the country. New natural gas-fired capacity in PJM accounted for over 40 percent of the total of that resource developed within the U.S. over these three years, while new wind, solar and storage in PJM was less than 10 percent of the total amount of such resources that came on-line in the country during this time period. Moreover, the new merchant natural gas developed in the three Eastern RTOs accounted for over half of the total new natural gas capacity.<sup>5</sup>

Along with the development of excess new resources, RPM did not send price signals for the retirement of older unneeded fossil fuel resources. A recent analysis from the Rocky Mountain Institute found that 27% of the U.S. coal fleet could be retired without replacement by any new resource and that in PJM, over half of the coal fleet can be retired while maintaining a 15% regional reserve margin.<sup>6</sup>

These data demonstrate that these capacity constructs have provided advantages to specific resource types over others and failed to account for the negative externalities from these higher emission resources. Reliance on RPM has therefore produced a mix of resources that do not meet state policy goals while at the same time imposing excess costs on consumers.

## RECOMMENDATIONS

It is crucial that reforms are implemented to the capacity constructs which can then lay the foundation for designing a suite of markets and services that support both resource adequacy and economically accurate and efficient market signals. I therefore recommend that such reforms include the following components:

- The capacity constructs should function as voluntary residual markets that provide for the backstop procurement of capacity to meet resource adequacy, rather than the use of mandatory auctions to procure capacity. Relative to a ‘Targeted MOPR,’ this approach has the advantage of drawing a bright line establishing that self-supply and state policy decisions are outside of the market’s purview.

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<sup>4</sup> *Over-Procurement of Generating Capacity in PJM: Causes and Consequences*, prepared by Jim Wilson for the Sierra Club and Natural Resources Defense Council, February 2020, Appendix A-1.

<sup>5</sup> Analysis of new capacity data from Energy Information Administration, *Electric Power Monthly*, February 2019, 2020, and 2021, Table 6-3, and *Financial Arrangements Behind New Generating Capacity, 2018-2019 Update*, prepared by Elise Caplan, American Public Power Association, October 2020.

<sup>6</sup> *Cutting Carbon While Keeping the Lights On - Insight Brief*, Rocky Mountain Institute, March 2020, p. 7.

- Capacity prices should accurately reflect the true level of generating capacity, taking into account all capacity resources, regardless of their source of revenue.
- There should not be any MOPR or similar rules. The retention of a MOPR targeted to “actual” buyer-side market power should be designed extremely narrowly to avoid including resource procurement subject to state policy goals and integrated utility self-supply.
- Fundamental capacity construct reforms are a necessary first step and should be immediately followed by the development of reforms to the resource adequacy paradigm and improvements to the energy and ancillary services markets to better address the operational needs of the grid in all time intervals.

More details on the Sustainable FERC Project’s recommendations regarding the capacity constructs can be found at:

- Presentations at PJM's Capacity Market Reform Workshop, [March 4, 2021](#) and [March 12, 2021](#)
- [Comments of Public Interest Organizations on New England States’ Wholesale Transmission Planning Technical Forum](#), March 1, 2021

Again, I greatly appreciate the Commission’s initiation of this and future technical conferences and its commitment to improving market design and resource adequacy determinations.